Package: piiR (via r-universe)

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Type Package

Title Predictive Information Index ('PII')

Version 0.3.0

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Description A simple implementation of the Predictive Information Index ('PII').

Encoding UTF-8

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LazyData true

Imports stats (>= 3.6.0)

VignetteBuilder knitr

Suggests knitr, rmarkdown

RoxygenNote 7.3.2

Repository https://theotherdrwells.r-universe.dev

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RemoteUrl https://github.com/theotherdrwells/piir

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pii *Predictive Information Index (PII)*

Description

Computes the Predictive Information Index using one of three methods: "r2" (R-squared ratio), "rm" (RMSE-based), or "v" (variance ratio).

Usage

```
pii(y, score_pred, full_pred = NULL, type = c("r2", "rm", "v"))
```

Arguments

y	Observed outcome vector.
score_pred	Predictions from score-based model.
full_pred	Predictions from the full model.
type	Character. One of "r2", "rm", or "v".

Value

A numeric value between 0 and 1.

Examples

```
set.seed(1)
y     <- rnorm(100)
full  <- y + rnorm(100, sd = 0.3)
score <- y + rnorm(100, sd = 0.5)
pii(y, score, full, type = "r2")
pii(y, score, full, type = "rm")
pii(y, score, full, type = "v")
```

pii_plot *Plot Score vs Outcome for Visual PII Insight*

Description

Plot Score vs Outcome for Visual PII Insight

Usage

```
pii_plot(score, outcome, bins = 10)
```

Arguments

`score`	Numeric score vector
`outcome`	Numeric outcome vector
`bins`	Number of bins for discretization

Value

A base R plot

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